



## ecology and environment, inc.

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International Specialists in the Environment

EPA Region 5 Records Ctr.



303295

### M E M O R A N D U M

DATE: March 7, 1986  
TO: File *JK*  
FROM: Suzanne Kozlowski/Steve Nelson  
SUBJECT: Illinois/R05-8303-01F/IL0244  
Chicago Heights/LoBue #2  
ILD 980902050

LoBue #2 is an active open dump/landfill that has operated since approximately 1970. The site is located on the north side of Sauk Trail Road south of Chicago Heights. The site is permitted to accept foundry sand, slag, cinders, concrete, brick, asphalt and cardboard. LoBue #2 also accepted empty drums which were believed to contain paint and solvents. The site was identified by the Illinois EPA in the form of a Preliminary Assessment, submitted to the U.S. EPA.

On October 25, 1984, Ecology and Environment FIT members conducted a site inspection and interview. Five soil samples were later collected on July 2, 1985 to obtain waste characteristics. The analytical data is summarized in Table 1. The background sample, MEF 231, contained low levels of arsenic (As), lead (Pb), and vanadium (V). Three soil samples contained beryllium (Be), cadmium (Cd), copper (Cu), mercury (Hg) and nickel (Ni) as well as lead at levels ten times above background. Sample MEF 234 showed no contamination. Sample MEF 235 contained polyaromatic hydrocarbons and pesticides while no other samples showed any organic contamination.

Soils in the area are predominantly clays above ten feet of silty loam overlying bedrock. Contaminants can reach the Silurian-Dolomite bedrock aquifer by migrating through fractures and solution cavities. However, the potential for contaminant migration appears quite low. Furthermore, little or no groundwater flow occurs through the soil zone as evidenced by the monitoring wells present. Inspections by the Illinois EPA found little water in the southwest monitoring well, and no water in the southeast monitoring well. The FIT inspection on 10/25/84 found the same conditions even though surface conditions were very wet at the time. Thus, the potential for groundwater contamination appears quite low.

81E:4X

Table 1  
LoBue #2  
Summary of Analytical Data

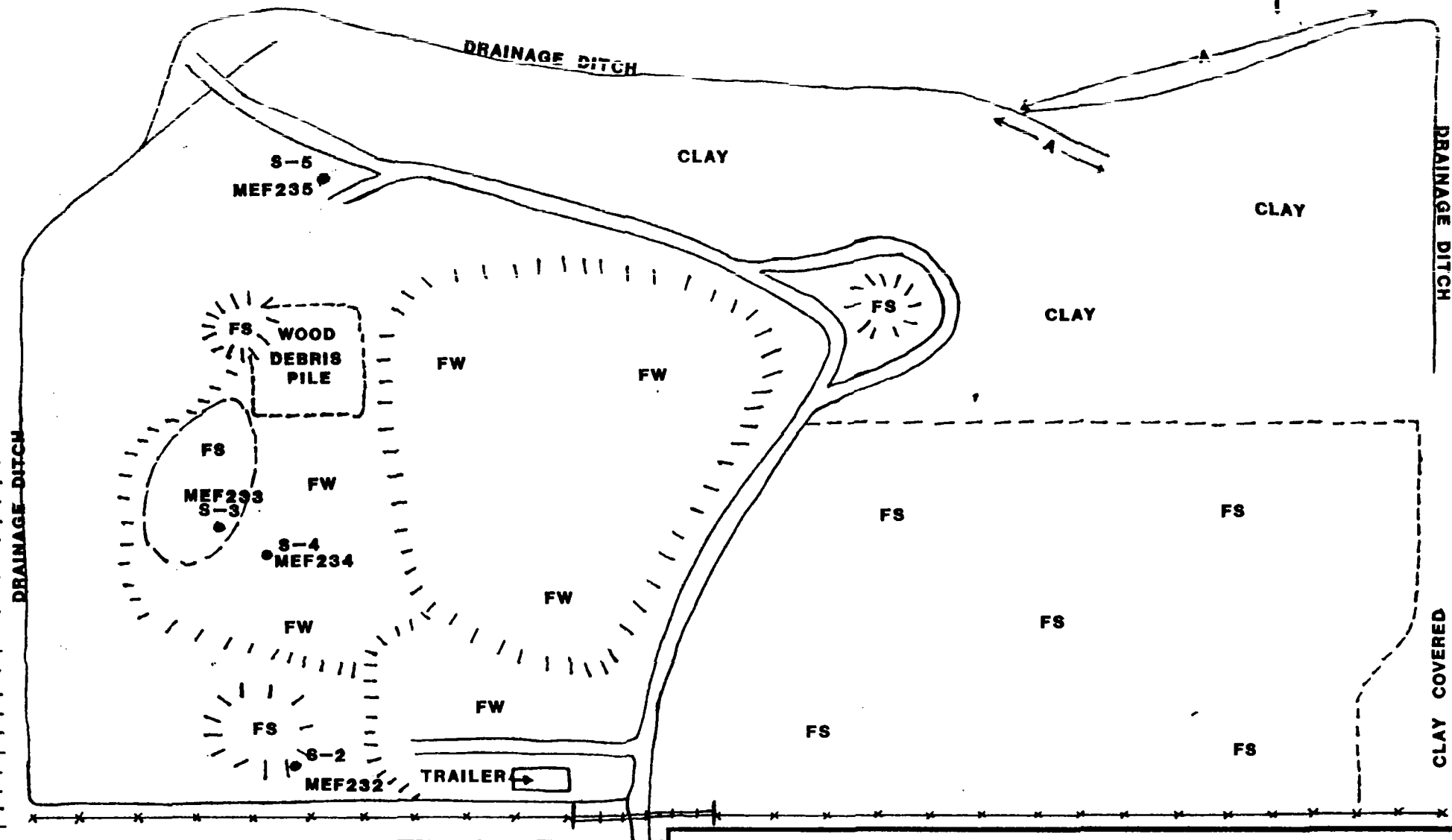
(1) Metals Detected	Soil Sample Locations			
	MEF 231	MEF 232	MEF 233	MEF 235
As	9.3	104	20	14
Be	--	4	6	--
Cd	--	--	3	5
Cu	--	128	56	33
Pb	9.2	173	89	177
Hg	--	0.14	0.20	0.16
Ni	--	100	90	41
V	29	47	40	--

Sample MEF 234 showed no contamination. (S-4 on map)

Organics(2) Detected	MEF 235
Phenathrene	540
Fluoranthene	1000
Pyrene	610
Chrysene	360
Benzo(b)fluoranthene	530
Benzo(K)fluoranthene	530
4-4'DDE	31
4-4'DDT	49

Legend:

- MEF 231 - Background sample
- MEF 232 - SE edge of foundry sand pile (S-2 on map)
- MEF 233 - W edge of foundry sand pile (S-3 on map)
- MEF 235 - N edge of foundry sand pile (S-5 on map)
- (1) reported in parts per million
- (2) reported in parts per billion



SAUK TRAIL ROAD

# LEGEND

FS - FOUNDRY SAND PILE

FW - FOUNDRY WASTE STOCKPILE

A - SOLID WASTE AND DIRT PILES

ecology and environment, inc.

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SCALE: NO SCALE

DATE: 1-14-86

DRAWN BY SEK

REVISED

LoBue # 2

TDD # R05-8303-01F

DRAWING NUMBER